

Monitoring Station	
Key	
Station Type	Station Description
A	DEQ Ambient Monitoring Station
B	DEQ Biological Monitoring Station
C	DEQ Fish Tissue Monitoring Station
C2	Coastal 2000 (NCA) Probabilistic Monitoring Station
CB	Chesapeake Bay Program Monitoring Station
CB-B	Chesapeake Bay Estuarine Benthic Probabilistic Monitoring Station
CMON	Citizen Monitoring Station
EPA	Environmental Protection Agency Monitoring Station
FOSR	Friends of the Shenandoah River
FPM	Freshwater Probabilistic Monitoring Station
L	DEQ Lake Monitoring Station
MAIA	Mid Atlantic Integrated Assessment Monitoring Station
MU	Municipal Monitoring
OWML	Occoquan Watershed Monitoring Lab Station
PFCO	DEQ Pfiesteria Monitoring Station
PWFQ	DEQ Pfiesteria Monitoring Station
SNP	Shenandoah National Park
SS	DEQ Special Studies Monitoring Station
TE	DEQ Tidal Embayment Monitoring Station (special study)
TM	DEQ TMDL Monitoring Station (special study)
TOX	Chesapeake Bay Special Toxics Monitoring Station
USFS	United States Forest Service Monitoring Station
USFW	United States Fish and Wildlife Service Monitoring Station
USGS	United States Geological Survey Monitoring Station
UVA	University of Virginia
VDHB	Virginia Department of Health BEACH Monitoring Station
Ambient Monitoring Status Codes	
Status	Status Description
S	Supporting
IN	Insufficient Data
IN/O	Insufficient Data with Observed Effects
O	Observed Effects
IM	Impaired
W	Not Assessed
NA	Not Applicable
Biological Monitoring Status Codes	
Status	Status Description
NI	Not Impaired
SI	Slightly Impaired
MI	Confirmed Moderately Impaired
VI	Severely Impaired
J	Reserve Judgement
O	Unconfirmed Moderate Impaired Rating (Observed Effects)
Citizen Biological Monitoring Status Codes	
Status	Status Description
HP	High Probability for Adverse Conditions (Insufficient Information but having Observed Effects)
MP	Medium Probability for Adverse Conditions (Insufficient Information but having Observed Effects)
LP	Low Probability for Adverse Conditions (Insufficient Information but indicating Fully Supporting)

Table with columns: ID/STATION ID, REGION TYPE, VALUE/WATERSHED, Temperature, Dissolved Oxygen, Bacteria Data (Fecal Coliform, E. Coli, Enterococci), Water Column (Metals, Other Toxics), Sediment (Metals, Other Toxics), Fish Tissue (Metals, Other Toxics), Benthic, Nutrients (Total Phosphorus, Chlorophyll a), and Comments. Rows include stations like VAP-0026, VAP-0228, VAP-0326, etc.

APPENDIX G

EQUISID	STATION ID	REGION TYPE	VALUHS WATERSHED	CONVENTIONAL WATER COLUMN MONITORING DATA												BACTERIA DATA					WATER COLUMN					SEDIMENT				FISH TISSUE			BENTHIC			NUTRIENTS			COMMENTS			
				Temperature				pH				Fecal Coliform				E. Coli				Enterococci				Metals		Other Toxic		Metals		Other Toxic		Metals		Other Toxic		Bio Mon	Total Phosphorus			Chlorophyll a		
				Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status	Violations #	Status		Violations #	Status				
VAC1-76R	ROAD6A98	44RD0108	SCRO	A	RL12	IL78R	0	79	S	39	79	M	0	72	S	1	35	S	0	9	S																					1999 FT Sed PCBs 1 Species
VAC1-76R	ROAD6A98	44RD0108	SCRO	A	RL12	IL78R	0	79	S	39	79	M	0	72	S	1	35	S	0	9	S																				Trend Analysis Performed - No statistically significant trends were detected	
VAC1-76R	ROAD6A98	44RD0108	SCRO	A	RL12	IL78R	0	79	S	39	79	M	0	72	S	1	35	S	0	9	S																				Trend Analysis Performed - No statistically significant trends were detected	
VAC1-76R	ROAD6A98	44RD0108	SCRO	A	RL12	IL78R	0	79	S	39	79	M	0	72	S	1	35	S	0	9	S																				Trend Analysis Performed - No statistically significant trends were detected	

Table with columns: STATION ID, REGION TYPE, VALUE WATERSHED, Temperature, Dissolved Oxygen, pH, Fecal Coliform, BACTERIA DATA (E. Coli, Enterococci), WATER COLUMN (Metals, Other Toxic), SEDIMENT (Metals, Other Toxic), FISH TISSUE (Metals, Other Toxic, Bio Mon), BENTHIC, NUTRIENTS (Total Phosphorus, Chlora/Wt a), and COMMENTS.

DO5B	STATION ID	REGION	TYPE	VAHUR WATERSHED	CONVENTIONAL WATER COLUMN MONITORING DATA						BACTERIA DATA						WATER COLUMN				SEDIMENT				FISH TISSUE				BENTHIC		NUTRIENTS				COMMENTS					
					Temperature	Dissolved Oxygen	pH	Violations #	Status	Fecal Coliform	E. Coli	Enterococci	Violations #	Status	Metals	Other Toxics	Metals	Other Toxics	Metals	Other Toxics	Metals	Other Toxics	Violations #	Status	Violations #	Status	Total Phosphorus	Chlorophyll a												
	6AKOX008.11	SWRO	C	BS07	Q03R												0 S	0 S			0 S		5 IM															In 2002, Rock bass, smallmouth bass and golden rehorse sucker were collected; no PAHs or metals were found to violate criteria. All samples exceeded the DEQ screening value for PCBs; three exceeded the VDH human health criteria. Sediment metals and DDT did not exceed ERL.		
	6AKOX008.14	SWRO	C	BS07	Q03R												0 S	0 S					12 IM															Three fish composite samples collected in 2004 were greater than the VDH human health criteria for PCBs; nine additional samples were greater than the DEQ screening value. All species were affected. Sediment PCBs did not exceed ERM, exceeded ERL.		
	6AKOX010.98	SWRO	C	BS07	Q03R																0 S		7 IM															One fish composite sample collected in 2004 was greater than the VDH human health criteria for PCBs; six additional samples were greater than the DEQ screening value. All species were affected. Sediment PCBs did not exceed ERM, exceeded ERL.		
	6AKOX12.06	SWRO	C	BS05	Q03R																0 S		7 IM															One fish composite sample collected in 2004 was greater than the VDH human health criteria for PCBs; six additional samples were greater than the DEQ screening value. All species were affected. Sediment PCBs did not exceed ERL.		
	6AKOX12.86	SWRO	C	BS05	Q03R																	0 S		5 IM			1	12 S										All five species collected in 2004 were greater than the VDH human health criteria for PCBs. Sediment PCBs did not exceed ERM, exceeded ERL.		
	6AKOX14.17	SWRO	A	BS05	Q03R	0	12 S	0	12 S	0	12 S	3	12 IM				0 S					0 S		5 IM														One fish composite sample collected in 2004 was greater than the VDH human health criteria for PCBs; five additional samples were greater than the DEQ screening value. All species were affected. Sediment PCBs did not exceed ERL.		
	6AKOX14.37	SWRO	C	BS05	Q03R																	0 S		6 IM															One fish composite sample collected in 2004 was greater than the VDH human health criteria for PCBs; six additional samples were greater than the DEQ screening value. All species were affected. Sediment PCBs did not exceed ERL.	
	6AKOX17.97	SWRO	C	BS05	Q03R																	0 S		7 IM															Downstream of Long Bottom Branch, Four fish composite samples collected in 2003 were greater than the VDH human health criteria for PCBs; one additional sample was greater than the DEQ screening value. All species were affected. No additional exceedance was detected for halogenated organics. PCB in sediment exceeded ERL.	
	6AKOX19.3	SWRO	C	BS04	Q03R																	0 S		5 IM															In 2004, All five species collected exceeded the VDH human health criteria for PCBs. Sediment PCBs did not exceed ERM, exceeded ERL.	
	6AKOX20.36	SWRO	C	BS04	Q03R																	0 S		5 IM														Near Big Butt Branch, In 2003, Two rainbow trout, northern hog sucker, and creek chub exceeded the TSV for PCBs. An additional rainbow trout exceeded the VDH human health concern value. No additional exceedance was detected for halogenated organics. No PCBs were detected in sediment.		
	6AKOX22.00	SWRO	C	BS04	Q03R																	0 S		5 IM															In 2004, This is the mainstem of Knox Creek just upstream of the Big Butt Branch confluence. N 2004 one fish composite was greater than the PCB human health criteria; four were greater than the DEQ screening value. Sediment PCBs did not exceed ERL.	
	6AKOX23.25	SWRO	C	BS04	Q03R																	0 S		5 IM															This is a sediment retention facility that discharges to upper Big Butt Branch in the Knox Creek headwaters. No samples exceeded the DEQ screening criteria for PCB.	
	6AKOX23.25a	SWRO	C	BS04	Q03R																	0 S		0 S														Sediment PCBs did not exceed ERL.		
	6AKOX23.25b	SWRO	C	BS04	Q03R																	0 S		0 S														In 2004, Six species were collected; all were less than the DEQ screening value for PCBs. Sediment PCBs did not exceed ERL.		
	6AKOX23.25c	SWRO	C	BS04	Q03R																	0 S		0 S															In 2004, Sediment PCBs did not exceed ERL.	
	6AKOX23.25d	SWRO	C	BS04	Q03R																	0 S		0 S															In 2004, Sediment PCBs did not exceed ERL.	
	6ALAF001.03	SWRO	A	BS20	Q10R	0	13 S	0	13 S	0	13 S	1	12 S									0 S																		
	6ALB000.07	SWRO	PFM	BS03	Q02R	0	2 S	0	2 S	0	2 S	0	1 IN				0 S	0 S	0 S																					
	6ALEV130.00	SWRO	C	BS15	Q08R																	0 S	2 O	2 O	10 IM															In 2002, Two channel catfish, a rock bass and northern hog sucker were collected. As was found to violate criteria in a rock bass and a channel catfish sample. No PAHs, metals or insecticides were found to exceed criteria. All samples exceeded the human health criteria for PCBs. A sediment sample exceeded ERM for both PCB and DDT. Total Chlordane and DDT exceeded ERL.
	6ALEV130.25	SWRO	C	BS15	Q08R																	0 S																		In 2000, PCBs were detected in two channel catfish, gizzard shad, northern hog sucker, and rock bass. A channel catfish and gizzard shad exceeded the VDH human health criteria. No insecticides were greater than the screening values. Sediment PCBs or metals did not exceed ERL.
	6ALEV130.27	SWRO	C	BS15	Q08R																	1 O																		Total Chlordane and DDT exceeded ERL.
	6ALEV130.29	SWRO	B	BS15	Q08R	0	1 IN	0	1 IN	0	1 IN																												Sediment sample upstream of Conaway Creek was greater than the ERM for PCB.	
	6ALEV130.52	SWRO	C	BS15	Q08R																	0 S																	In 2000, Sediment PCBs and DDT did not exceed ERL.	
	6ALEV130.79	SWRO	C	BS15	Q08R																	0 S																	In 2000, Sediment pesticides or PCBs did not exceed ERL.	
	6ALEV131.14	SWRO	C	BS15	Q08R																	0 S	0 S																In 2000, No sediment ERM was exceeded; PCBs, As, Cu, Ni exceeded ERL.	
	6ALEV131.27	SWRO	C	BS15	Q08R																	1 O																	In 2000, Total Chlordane exceeded ERL; PCBs exceeded ERM.	
	6ALEV131.52	SWRO	A	BS15	Q08R	0	50 S	0	49 S	0	50 S	10	47 NA				0 S					0 S					1	48 S											Total Chlordane exceeded ERL; DDT exceeded ERL.	
	6ALEV131.88	SWRO	C	BS15	Q08R																	0 S																	In 2000, Total Chlordane exceeded ERL.	
	6ALEV132.16	SWRO	C	BS15	Q08R																	0 S																	DDT exceeded ERL.	
	6ALEV132.31	SWRO	C	BS15	Q08R																	0 S																	In 2000, Sediment PCBs or DDT did not exceed ERL.	
	6ALEV132.62	SWRO	C	BS15	Q08R																	0 S																	In 2000, Sediment PCBs did not exceed ERL; total Chlordane exceeded ERL.	
	6ALEV132.91	SWRO	C	BS15	Q08R																	0 S																		In 2000, Sediment PCBs did not exceed ERL.
	6ALEV134.82	SWRO	C	BS14	Q08R																	0 S																		Downstream of WBG6 RR yard, In 2000, PCBs were detected in two channel catfish, gizzard shad and rehorse sucker. A gizzard shad exceeded the VDH human health criteria. No insecticides were greater than the screening values. Total Chlordane exceeded the ERL in sediments.

ID/05B	STATION ID	REGION TYPE	VAHUR WATERSHED	CONVENTIONAL WATER COLUMN MONITORING DATA				BACTERIA DATA				WATER COLUMN				SEDIMENT				FISH TISSUE				BENTHIC		NUTRIENTS		COMMENTS										
				Temperature	Dissolved Oxygen	pH	Turbidity	Fecal Coliform	E. Coli	Enterococci	Metals	Other Toxics	Metals	Other Toxics	Metals	Other Toxics	Bio Mon	Total Phosphorus	Chlorophyll a																			
Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #	Violations #			
VAS-N37R_LRR01A94	94LRR001.39	SWRO	A/B/C	NE88	N37R	0	29	S	2	29	S	0	29	S	12	24	NA	10	17	IM																Four of the geoscan calculations (80%) violated the bacteria standard for fecal coliform and e. coli.		
VAS-N37R_LRR01A94	94LRR001.99	SWRO	A	NE88	N37R	0	12	S	0	12	S	0	12	S	5	11	NA	5	11	IM																		
VAS-N37R_LRR02A92	94LRR002.26	SWRO	A	NE88	N37R	0	12	S	0	12	S	0	12	S	5	11	NA	2	11	IM																		
VAS-N37R_LRR02A92	94LRR002.59	SWRO	A/T/M	NE88	N37R	0	12	S	0	12	S	0	12	S	2	11	IM	3	11	IM																		
VAS-N37R_LRR02A92	94LRR004.03	SWRO	A	NE88	N37R	0	12	S	0	12	S	0	12	S	4	11	IM	3	11	IM																		
VAS-N37R_LRR02A92	94LRR005.99	SWRO	A	NE88	N37R	0	12	S	0	12	S	0	12	S	3	11	IM	2	11	IM																		
VAS-N37R_LRR02A92	94LRR006.43	SWRO	A/B	NE88	N37R	0	12	S	0	12	S	0	12	S	1	11	S	1	11	S																		
VAS-N44R_LVR01A96	94LVR001.34	SWRO	A	NE11	N44R	0	9	S	0	9	S	0	9	S	2	8	IM																					
VAS-N44R_LVR01A96	94LVR002.65	SWRO	A	NE11	N44R	0	9	S	0	9	S	0	9	S				1	9	IN																		
VAS-N19R_MER01A90	94MERC000.37	SWRO	A	NE28	N19R	0	10	S	0	10	S	0	10	S				5	9	IM																		
VAS-N36R_MFK01A92	94MFK000.11	SWRO	SS	NE87	N36R	0	12	S	0	12	S	0	12	S	1	12	S																					
VAS-N36R_MFK01A92	94MFK000.03	SWRO	A	NE86	N36R	0	14	S	0	14	S	0	14	S	4	12	IM																					
VAS-N28R_MBS01A90	94MBS000.31	SWRO	A	NE28	N28R	0	14	S	0	14	S	0	14	S	4	12	IM																					
VAS-N28R_MBS01A90	94MBS006.58	SWRO	PFM	NE89	N28R	0	1	IN	0	1	IN	0	1	IN	0	1	IN	0	1	IN																		
VAS-N16R_NEW01A90	94NEW107.51	SWRO	A	NE43	N16R	0	51	S	0	51	S	0	51	S	8	46	NA	5	21	IM																		
VAS-N08R_NEW02A90	94NEW117.47	SWRO	C	NE25	N08R	0	52	S	0	52	S	0	52	S	6	46	NA	3	21	IM																		
VAS-N08R_NEW01B98	94NEW127.49	SWRO	A	NE21	N08R	0	40	S	0	40	S	0	40	S	4	7	IM	5	7	IM																		
VAS-N08R_NEW01B98	94NEW132.86	SWRO	A	NE21	N08R	0	40	S	0	40	S	0	40	S	4	7	IM	5	7	IM																		
VAS-N08R_NEW01A90	94NEW146.23	SWRO	A/B	NE16	N08R	0	46	S	0	46	S	0	46	S	13	47	NA	7	21	IM																		
VAS-N44R_NEW01C09	94NEW158.40	SWRO	C	NE12	N44R																																	
VAS-N44R_NEW01A98	94NEW171.94	SWRO	C	NE10	N44R																																	
VAS-N02R_NEW03C04	94NEW181.66	SWRO	A	NE08	N02R	0	12	S	0	12	S	0	12	S	3	12	IM																					
VAS-N44R_PBC01A96	94PBC001.12	SWRO	A	NE09	N44R	0	9	S	0	9	S	0	9	S				1	9	IN																		
VAS-N44R_PBC01C04	94PBC002.66	SWRO	A	NE09	N44R	0	9	S	0	9	S	0	9	S				1	9	IN																		
VAS-N11R_PBC00B94	94PBC000.79	SWRO	A	NE31	N11R	0	9	S	0	9	S	0	9	S				2	9	IM																		
VAS-N02R_NEW03C04	94NEW187.46	SWRO	A/C	NE04	N02R	0	17	S	0	17	S	0	17	S	1	14	S																					
VAS-N44R_PBC01A96	94PBC001.12	SWRO	A	NE09	N44R	0	9	S	0	9	S	0	9	S				1	9	IN																		
VAS-N44R_PBC01C04	94PBC002.66	SWRO	A	NE09	N44R	0	9	S	0	9	S	0	9	S				1	9	IN																		
VAS-N44R_PBC01C04	94PBC000.79	SWRO	A	NE31	N11R	0	9	S	0	9	S	0	9	S				2	9	IM																		
VAS-N02R_NEW03C04	94NEW187.46	SWRO	A/C	NE04	N02R	0	17	S	0	17	S	0	17	S	1	14	S																					
VAS-N44R_PBC01A96	94PBC001.12	SWRO	A	NE09	N44R	0	9	S	0	9	S	0	9	S				1	9	IN																		
VAS-N44R_PBC01C04	94PBC002.66	SWRO	A	NE09	N44R	0	9	S	0	9	S	0	9	S				1	9	IN																		
VAS-N44R_PBC01C04	94PBC000.79	SWRO	A	NE31	N11R	0	9	S	0	9	S	0	9	S				2	9	IM																		

CONVENTIONAL WATER COLUMN MONITORING DATA		Temperature		Dissolved Oxygen		pH		Fecal Coliform		BACTERIA DATA		WATER COLUMN		SEDIMENT		FISH TISSUE		BENTHIC		NUTRIENTS		COMMENTS	
ID	STATION ID	REGION	TYPE	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES		VIOLATIONS #
0305B	STATION ID	REGION	TYPE	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES
0305B	STATION ID	REGION	TYPE	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES
0305B	STATION ID	REGION	TYPE	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES
0305B	STATION ID	REGION	TYPE	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES	VIOLATIONS #	SAMPLES

